



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,906	10/12/2001	Kenji Fukasawa	MIPFP004	8972

22850 7590 09/15/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

ROHWER, JACOB P

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/974,906	<b>Applicant(s)</b> FUKASAWA, KENJI	
	<b>Examiner</b> Jacob P. Rohwer	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Pg 12 #10, Pg 14 #112 and #103, and Pg 17 #3100. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig 3 #100 and #113, Fig 11--S300-S310 -S330-S340, and Fig 12 S400 and S450. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Art Unit: 2624

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 60**, which depends from claim 49, recites the limitation "said computer readable memory" in Line 2. There is insufficient antecedent basis for this limitation in the claim.

**Claim 61**, which depends from claim 49, recites the limitation "said computer readable memory" in Line 3. There is insufficient antecedent basis for this limitation in the claim.

Examiner will assume that claims 60 and 61 are dependent upon claim 59.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4, 7-8, 10-11, 19, 23, 27-30, 32-35, 39, 42, 44-46, 48, and 71-72** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 6,108,443 to Ito in view of US Patent Number 6,650,772 to Inoue et al, and further in view of US Patent Number 6,891,639 to Nabeshima et al.

Regarding claim 1, Ito discloses an image processing apparatus (**Fig 1 #3**) for performing image processing on image data, comprising:

means for acquiring an image file that contains the image data (**Col 4 Lin 3, a film scanner**); and

means for performing image processing on said image data, including means for performing color conversion of said out of gamut information to a wide gamut color space when the means for analyzing decides to use said out of gamut information, wherein a gamut of the wide gamut color space is sufficiently large to accommodate the image data associated with the out of gamut information. (**Col 1-2 Lin 65-67 and 1-12**)

Ito does not expressly disclose means for acquiring use information associated with said image file, said use information being indicative of whether out of gamut information for a predetermined color space is to be used in performing image processing on the image data.

However, Inoue discloses means for acquiring use information associated with said image file, said use information being indicative of whether out of gamut information for a predetermined color space is to be used in performing image processing on the image data. (**Fig 1 #12, Col 16 Lin 32-48, Note that merely determining if there is out of gamut information is indicative of whether it is used for processing.**)

The Ito and Inoue Patents are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the means for acquiring out-of-gamut information as specified in the Inoue Patent, in order to determine it out of gamut values will be used in the image processing of the image as specified in the Ito Patent.

The suggestion/motivation for doing so would have been to allow for the correct color conversion process so that the original image will be mapped accordingly into a reproduced image for print or display.

Furthermore, Ito does not expressly disclose means for analyzing the use information and deciding whether to use the out of gamut information for said predetermined color space.

However, Nabeshima discloses means for analyzing the use information and deciding whether to use the out of gamut information for said predetermined color space. **(Fig 8, a display asks the operator if calibration should proceed in order to accommodate the out-of-gamut information. Within the application for patent, applicant discloses that out of gamut information use is instructed by the operator.)**

The Ito and Nabeshima Patents are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the means for analyzing out-of-gamut information as specified in the

Nabeshima Patent, in order to determine the output gamut of the reproduced image as specified in the Ito Patent.

The suggestion/motivation for doing so would have been to save time in processing the out-of-gamut information when the user specifies it is not necessary to process the out-of-gamut information. **(Nabeshima Col 1 Lin 35-36)**

Therefore it would have been obvious to combine the Inoue and Nabeshima Patents with the Ito Patent to obtain the invention in claim 1.

Regarding claim 2, which depends from claim 1, Nabeshima further discloses an image processing apparatus according to claim 1, wherein:

said means for performing color conversion performs image processing of said image data via a pre-established color space having a gamut equivalent to that of said predetermined color space when the means for analyzing decides not to use said out of gamut information. **(Col 5 Lin 2-5, When the button pressed is no in response to the user prompt shown in Fig 8, Nabeshima discloses that the image data are printed under the current operation condition, which means that the printer is not calibrated to accommodate the out of gamut information meaning that the input and output color spaces are equivalent.)**

Regarding claim 3, which depends from claim 1, Nabeshima further discloses an image processing apparatus according to claim 1, wherein:

said image data contained in said image file is defined in a first color space;

said means for acquiring includes means for converting the image data contained in the image file from said first color space to a second color space; and

said means for performing color conversion converts the image data in said second color space to a third color space using said out of gamut information. **(Fig 2 shows input data being converted to XYZ color space, and then a second conversion to LAB color space)**

Regarding claim 4, which depends from claim 1, Ito further discloses an image processing apparatus according to claim 1, wherein:

said image data contained in said image file is produced to fall within a first color space and includes **(Col 1 Lin 66, original image in a first color space)**

first positive color representation values that are color representation values lying within a gamut of said predetermined color space,

second positive color representation values, and

negative color representation values that are color representation values lying outside the gamut of said predetermined color space; and said means for acquiring includes

means for converting the color space of said image data from said first color space to a second color space by processing said negative color values and at least one of said first positive color representation values and said second positive color representation values **(Col 2 Lin 4-12 talk about expanding the second color space in order to accommodate for positive values outside the gamut and/or negative values).**

Regarding claim 7, which depends from claim 3, Ito does not expressly disclose an image processing apparatus according to Claim 3, wherein:



said means for converting the image data contained in the image file from said first color space to a second color space includes means for performing a first matrix operation on image data represented by said first color space, and

said means for performing color conversion converts the image data in said second color space to a third color space includes means for performing a second matrix operation on image data represented by said second color space.

However, Nabeshima discloses an image processing apparatus according to Claim 3, wherein:

said means for converting the image data contained in the image file from said first color space to a second color space includes means for performing a first matrix operation on image data represented by said first color space (**Fig 2 #110A**), and

said means for performing color conversion converts the image data in said second color space to a third color space includes means for performing a second matrix operation on image data represented by said second color space (**Fig 2 #110B**).

The Ito and Nabeshima Patents are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the two matrix operations for converting from one color space to another as specified in the Nabeshima Patent, in order to produce a converted color space with a wider color gamut than the previous as specified in the Ito Patent.

The suggestion/motivation for doing so would have been to simply provide a conversion method for the color conversion mentioned in Ito. Ito mentions that conversion is carried out from a specific color space to a standard color space, but does not specifically mention the method in which it is carried out. It would have been obvious to one of ordinary skill in the art to use matrix operations as a method of converting from one color space to another because matrix operations are very well known in the art and are the most common conversion methods used in color conversion.

Therefore it would have been obvious to combine the Nabeshima Patent with the Ito Patent to obtain the invention in claim 7.

Regarding claim 8, please see the rejection of claims 1 and 4. All the claimed matter is incorporated into claims 1 and 4.

Regarding claim 10, the apparatus disclosed in the combination of Ito, Nabeshima, and Inoue as specified in claim 1 above corresponds to the computer program product claimed in claim 10.

Ito discloses that color conversion from a specific color space to a standard color space exists in an image processing laboratory setting, more specifically, a personal computer used by an operator or customer. **(Col 1 Lin 25-33)** This disclosure represents the fact that the apparatus specified in claim 1 incorporates a personal computer used to complete the image processing, and a computer program product that carries out the method of color conversion that the apparatus in claim 1 performs runs the personal computer.

Additionally, Ito does not expressly disclose a fourth element of the apparatus specified in claim 1 consisting of an output means to output said image data after color conversion is performed.

However, Nabeshima discloses a print engine (**Fig 1 #20**) corresponding to the fourth computer code device of claim 10 that outputs the image data after color conversion of the out of gamut information is performed.

The Ito and Nabeshima Patents are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the print engine as an image data output means as specified in the Nabeshima Patent, in order to reproduce the image data once color conversion has occurred as specified in the Ito Patent.

The suggestion/motivation for doing so would have been to provide customers or operators with a hard copy of an image reproduction, such as a photograph. Therefore it would have been obvious to combine the Nabeshima Patent with the Ito Patent to obtain the invention in claim 10.

Regarding claim 11, which depends from claim 10, the apparatus disclosed in the combination of Ito, Nabeshima, and Inoue as specified in claims 1 and 4 above corresponds to the computer program product claimed in claim 11.

Regarding claim 19, please see rejection of claims 1 and 3 above. The apparatus in claims 1, 3 and 10 perform the method of claim 19.

Regarding claim 23, which depends from claim 19, please see rejection of claims 1, 3 and 4 above. The apparatus in claims 1, 3 and 4 perform the method of claim 23.

Regarding claim 27, which depends from claim 19, please see rejections of claims 1, 3 and 7 above. The apparatus in claims 1, 3 and 7 perform the method of claim 27.

Regarding claim 28, which depends from claim 19, Nabeshima further discloses a print engine (**Fig 1 #20**) for outputting said image data onto a print medium.

Regarding claim 29, please see rejection of claims 1 and 3 above. The apparatus in claims 1, 3 and 10 perform the method of claim 29.

Regarding claim 30, which depends from claim 29, please see rejection of claims 1, 3 and 4 above. The apparatus in claims 1, 3, and 4 perform the method of claim 30.

Regarding claim 32, please see rejection of claims 1 and 3 above. The apparatus in claims 1 and 3 perform the method of claim 32.

Regarding claim 33, please see rejection of claim 1 above. Additionally the processor is configured to analyze the use information in response to instructions from the operator as to whether or not the processor should use out of gamut information.

Regarding claim 34, which depends from claim 33, please see rejection of claims 1 and 2 above.

Regarding claim 35, which depends from claim 33, please see rejection of claims 1 and 3 above.

Regarding claim 39, which depends from claim 33, please see rejection of claims 1 and 4 above.

Art Unit: 2624

Regarding claim 42, which depends from claim 39, please see rejection of claims 1, 3 and 4 above.

Regarding claim 44, which depends from claim 35, please see rejection of claims 1, 3 and 7 above.

Regarding claim 45, which depends from claim 33, please see rejection of claims 1 and 10 above.

Regarding claim 46, please see rejection of claims 1, 3 and 4 above.

Regarding claim 48, which depends from claim 46, please see rejection of claims 1, 3, 4 and 10 above.

Regarding claim 71, please see rejection of claim 1 above. Additionally the operator provides the means for instructing the use of out of gamut information for the predetermined color space.

Regarding claim 72, which depends from claim 71, please see rejection of claims 1 and 2 above.

**Claims 13-16, 49-50, 54, 57, and 59-64** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ito, Inoue, and Nabeshima as specified in claim 1 above, and further in view of US Patent Number 6,812,961 to Parulski et al.

Regarding claim 13, the combination of Ito, Inoue, and Nabeshima discloses a device comprising:

means for generating image data; (**Ito, Col 4 Lin 3, a film scanner**)

means for generating image processing control information, said image processing control information including use information that is indicative of whether out

Art Unit: 2624

of gamut information for a predetermined color space is to be used in performing image processing on said image data. **(Inoue, Fig 1 #12, Col 16 Lin 32-48, Note that merely determining if there is out of gamut information is indicative of whether it is used for processing.)**

The combination of Ito, Inoue, and Nabeshima does not expressly disclose a device for generating an image file that contains image data and image processing control information for subsequent image processing of the image data.

However, Parulski discloses a device for generating an image file that contains image data and image processing control information for subsequent image processing of the image data. **(Fig 4 #420, Col 4 Lin 31-43)**

The combination of Ito, Inoue, and Nabeshima and the Parulski Patent are combinable because they both relate to generating image data for display and printing.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the generation of an image file that contains image data and image processing control information for subsequent image processing of the image data as specified in the Parulski Patent, in order to convert, display and eventually print image data throughout a plurality of different color spaces as specified in the combination of Ito, Inoue, and Nabeshima.

The suggestion/motivation for doing so would have been to transfer digital image files directly to a printer via transferring a memory card. **(Parulski Col 1 Lin 41-44)**

Therefore it would have been obvious to combine the Parulski Patent with the combination of Ito, Nabeshima and Inoue to obtain the invention in claim 13.

Art Unit: 2624

Regarding claim 14, which depends from claim 13, Parulski further discloses a device for generating an image file according to claim 13, further comprising:

means for conveying said image file to another device via at least one of a removable memory card, a wired communication link, and a wireless communication link. **(Fig 4 #16)**

Regarding claim 15, which depends from claim 13, the combination of Ito, Nabeshima and Inoue does not disclose a device for generating an image file according to claim 13, wherein:

the means for generating the image data being at least one of a DSC, DVC and a scanning device.

However, Parulski further discloses a device for generating an image file according to claim 13, wherein:

the means for generating the image data being at least one of a DSC, DVC and a scanning device. **(Fig 1 and 4, Col 3 Lin 38-39)**

The combination of Ito, Inoue, and Nabeshima and the Parulski Patent are combinable because they both relate to generating image data for display and printing.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use a DSC, DVC or a scanning device as means for generating the image data in the image file as specified in the Parulski Patent, in order to provide image data for color conversion as specified in the combination of Ito, Inoue, and Nabeshima.

The suggestion/motivation for doing so would have been to allow individual operators to perform image processing on personal images of interest in order that they be output and reproduced according to the operator's desire.

Therefore it would have been obvious to combine the Parulski Patent with the combination of Ito, Nabeshima and Inoue to obtain the invention in claim 15.

Regarding claim 16, which depends from claim 13, the combination of Ito, Nabeshima and Inoue does not disclose a device for generating an image file according to claim 13, wherein:

said means for generating the image file is configured to arrange said image file as an Exif file, and arrange said image processing control information in a Makernote portion of the Exif file.

However, Parulski further discloses a device for generating an image file according to claim 13, wherein:

said means for generating the image file is configured to arrange said image file as an Exif file, and arrange said image processing control information in a Makernote portion of the Exif file. **(Col 4 Lin 35-43)**

The combination of Ito, Inoue, and Nabeshima and the Parulski Patent are combinable because they both relate to generating image data for display and printing.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the arrangement of an Exif file as specified in the Parulski Patent, in order to provide image data for color conversion as specified in the combination of Ito, Inoue, and Nabeshima.



The suggestion/motivation for doing so would have been to allow the storage of image metadata relating to the actual image data. **(Col 4 Lin 39-40)**

Therefore it would have been obvious to combine the Parulski Patent with the combination of Ito, Nabeshima and Inoue to obtain the invention in claim 16.

Regarding claim 49, please see rejection of claims 1 and 13 above.

Regarding claim 50, which depends from claim 49, please see rejection of claims 1, 3 and 13 above.

Regarding claim 54, which depends from claim 49, please see rejection of claims 1, 4 and 13 above.

Regarding claim 57, which depends from claim 54, please see rejection of claims 1, 3, 4 and 13 above.

Regarding claim 59, which depends from claim 49, Parulski further discloses a computer readable memory configured to hold the image file and control information.

**(Fig 4 #16)**

Regarding claim 60, which depends from claim 59, please see rejection of claims 1, 13 and 59. Additionally, the computer readable memory is a removable memory card. **(Parulski, Fig 4 #16)**

Regarding claim 61, which depends from claim 59, Parulski further discloses an output port coupled to said computer readable memory and configured to convey said image file to another device via at least one of a wired connection and a wireless communication link. **(Fig 4 #322, Col 6 Lin 25-31)**

Regarding claim 62, which depends from claim 49, please see rejection of claims 1, 13 and 15 above.

Regarding claim 63, which depends from claim 49, please see rejection of claims 1, 13 and 16 above.

Regarding claim 64, which depends from claim 63, please see rejection of claims 1, 13 and 16 above.

**Claims 5, 6, 9, 12, 24, 25, 31, 40, 41, 43, and 47** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ito, Inoue and Nabeshima as specified in claim 1, and further in view of US Patent Number 5,862,434 to Yamakawa et al.

Regarding claim 5, which depends from claim 4, the combination of Ito, Inoue and Nabeshima discloses an image processing apparatus according to claim 4.

The combination of Ito, Inoue and Nabeshima does not expressly disclose that the said means for performing image processing includes means for correcting gamma information in said image data using a first gamma correction value when said image data contains said at least one of said first and said second positive color representation values, and using a second gamma correction value that is different from said first gamma correction value when said image data contains negative color representation values.

However, Yamakawa discloses an image processing apparatus that uses a gamma correction unit that varies correction corresponding to lookup tables and memories according to the input data. **(Col 6 Lin 47-53)**

The combination of Ito, Inoue and Nabeshima and the Yamakawa Patent are combinable because they both relate to image processing, more specifically converting image data from one color space to another with a different gamut using a gamma correction process.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use a gamma correction corresponding to different values as specified in the Yamakawa Patent, in order to correctly convert image data from one color space to a second wider color space as specified in the combination of Ito, Inoue and Nabeshima.

The suggestion/motivation for doing so would have been to achieve the correct luminance once the image data has been converted to the second color space.

Therefore it would have been obvious to combine the Yamakawa Patent with the combination of Ito, Inoue and Nabeshima to obtain the invention in claim 5.

Regarding claim 6, which depends from claim 5, the combination of Ito, Inoue, Nabeshima, and Yamakawa further discloses an image processing apparatus according to claim 5 wherein:

Said first color space is an RGB color space having a R component, a G component, and a B component; (**Yamakawa Fig 3**) and

Said second gamma correction value includes different component values for each of said R component, said G component, and said B component. (**Yamakawa Fig 3 shows Gamma Correction for the the R, G, and B components passed to the filter.**)

Art Unit: 2624

Regarding claim 9, which depends from claim 8, please see rejection of claims 1, 4 and 5.

Regarding claim 12, which depends from claim 11, please see rejection of claims 1, 4, 5 and 10.

Regarding claim 24, which depends from claim 19, please see rejection of claims 1, 3 and 5.

Regarding claim 25, which depends from claim 19, please see rejection of claims 1, 3 and 5. Furthermore, it is know that within a gamma correction look up table, certain values will be smaller than other values used.

Regarding claim 31, which depends from claim 30, please see rejection of claims 1, 3, 4 and 5.

Regarding claim 40, which depends from claim 39, please see rejection of claims 1, 4 and 5.

Regarding claim 41, which depends from claim 40, please see rejection of claims 1, 4, 5 and 25.

Regarding claim 43, which depends from claim 40, please see rejection of claims 1, 4, 5 and 6.

Regarding claim 47, which depends from claim 46, please see rejection of claims 1, 4 and 5.

**Claims 17, 18, 55, 56, 58, and 65-70** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ito, Inoue, Nabeshima, Parulski, and Yamakawa.

Art Unit: 2624

Regarding claim 17, please see rejection of claims 1, 4, 5 and 13. Furthermore all the matter claimed is incorporated in claims 1, 4, 5 and 13.

Regarding claim 18, which depends from claim 17, please see rejection of claims 1, 4, 5 and 13. Furthermore all the matter claimed is incorporated in claims 1, 4, 5 and 13.

Regarding claim 55, which depends from claim 54, please see rejection of claims 1, 4, 5 and 13.

Regarding claim 56, which depends from claim 55, please see rejection of claims 1, 4, 5, 13 and 25.

Regarding claim 58, which depends from claim 55, please see rejection of claims 1, 4, 5, 6 and 13.

Regarding claim 65, please see rejection of claims 1, 4, 5 and 13.

Regarding claim 66, which depends from claim 65, please see rejection of claims 1, 4, 5, 6 and 13.

Regarding claim 67, which depends from claim 65, please see rejection of claims 1, 4, 5, 6, 13 and 59.

Regarding claim 68, which depends from claim 67, please see rejection of claims 1, 4, 5, 6, 13 and 60.

Regarding claim 69, which depends from claim 68, please see rejection of claims 1, 4, 5, 6, 13 and 61.

Regarding claim 70, which depends from claim 66, please see rejection of claims 1, 4, 5, 6, 13 and 62.

**Claims 20-22 and 36-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ito, Inoue, and Nabeshima as specified in claim 1 above, further in view of US Patent Number 6,758,574 to Roberts.

Regarding claim 20, which depends from claim 19, the combination of Ito, Inoue, and Nabeshima discloses the method of claim 19 that includes color conversion to a wider gamut space.

The combination of Ito, Inoue, and Nabeshima does not expressly disclose the method of claim 19 wherein:

Said first color space is a YCbCr color space;

Said second color space is a first RGB color space; and

Said third color space is a second RGB color space.

However, Roberts discloses that there are multiple conversions between standard color spaces. **(Fig 1)** This disclosure incorporates the conversions from a YCbCr→(1)RGB→(2)RGB.

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the order of conversions between standard color spaces as specified in the Roberts Patent, in order to convert image data from one color space to a second wider color space, and even to a third wider color space as specified in the combination of Ito, Inoue and Nabeshima.

The suggestion/motivation for doing so would have been to accommodate all image processing apparatus that incorporate the use of devices with varying standard color spaces.

Therefore it would have been obvious to combine the Roberts Patent with the combination of Ito, Inoue and Nabeshima to obtain the invention in claim 20.

Regarding claim 21, which depends from claim 20, Roberts further discloses that the second color space is a sRGB color space. **(Fig 1)**

Regarding claim 22, which depends from claim 21, Roberts further discloses a YCbCr→(1)RGB→CIELAB. **(Fig 1)**

Regarding claim 36, which depends from claim 35, please see rejection of claims 1, 3 and 20.

Regarding claim 37, which depends from claim 36, please see rejection of claims 1, 3 and 21.

Regarding claim 38, which depends from claim 35, please see rejection of claims 1, 3 and 22.

**Claims 51-53** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ito, Inoue, Nabeshima, Parulski and Roberts.

Regarding claim 51, which depends from claim 50, please see rejection of claims 1, 3, 13 and 20.

Regarding claim 52, which depends from claim 51, please see rejection of claims 1, 3, 13 and 21.

Regarding claim 53, which depends from claim 50, please see rejection of claims 1, 3, 13 and 22.

**Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ito, Inoue, Nabeshima, Yamakawa, and Roberts.

Regarding claim 26, which depends from claim 22, please see rejection of claims 1, 3, 5, 6 and 22.

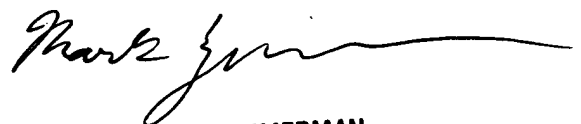
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob P. Rohwer whose telephone number is 571-272-5509. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*



MARK ZIMMERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600